

summer dress; the rest are all in winter garb. Two, male and female, are from Elba; and one was shot in August near Palmaria (Spezia).

PODICEPS AURITUS (Linn.).

A very rare species with us, and, I believe, has only occurred in winter. Our collection possesses three specimens—one from Genoa, the other two shot at Massaciuccoli on the 1st of December 1878; they are male and female. Most Italian authors have applied the name of this species to our common *P. nigricollis*.

XVI.—*Notes on Woodpeckers*.—No. I. *On the Piculets of the Old World*. By EDWARD HARGITT.

(Plate VII.)

THE present paper is the first of a series of small articles which I trust to be able to contribute to the pages of 'The Ibis' on the family of Picidæ, in which I have been for years interested, and of which I have managed to get together a considerable collection. Not long ago, in examining some of the birds at the British Museum, I discovered among the specimens of *Vivia* an example from China which was evidently referable to a new and hitherto undescribed species; and in giving a description of this interesting bird, I have added some notes on the other Piculets of the Old World, with a view to determine the present state of our knowledge of this little group. There are now five species known, which, in my opinion, may be referred to three well-characterized genera, which may be diagnosed as follows:—

a. digitis 4.

a'. regione oculari plumosa; cauda longiore, ultra remigum extremitates extensa; cauda longiore quam tarsus cum digito medio ungueque conjunctus . . . *Vivia*.

b'. regione oculari nuda; cauda brevior, alas haud attingente, et tarsum cum digito medio ungueque conjunctum vix æquante *Verreauxia*.

b. digitis 3,

regione oculari nuda *Sasia*.

Of these three genera *Vivia* is best known from the Himalayas, but has also occurred in the forests of the Wynaad. It ranges into China, and has also been found in the Karen hills, in Burmah, by Capt. Wardlaw Ramsay; and a specimen has also been obtained by Dr. Beccari in the mountains of Sumatra. *Sasia* is an Indo-Malayan genus, inhabiting the Sunda Islands, and extending throughout the Malayan peninsula, through the Burmese countries, into the Eastern Himalayas. *Verreauxia* is a very interesting form, confined, as far as we yet know, to the forests of the Gaboon in West Africa. It affords us another instance of the strong Malayan element which reappears in so many instances in the West-African forest-region; and this little Piculet is the more remarkable as it unites the characters of the two oriental genera, having the bare face and external aspect of a *Sasia* and the four-toed foot of a *Vivia*.

1. VIVIA.

Picumnus, Burton, P. Z. S. 1835, p. 1854 (nec Temminck).

Vivia, Hodgs. J. A. S. Beng. vi. p. 107 (1837). Type *V. innominata*.

Piculus, Hodgs. J. A. S. Beng. x. pt. 1, p. 29 (1841).

Type *V. innominata*.

Pipiscus, Cab. & Heine, Mus. Hein. Th. iv. p. 9 (1863).

Type *V. innominata*.

Range. Forests of the Wynaad, and South-Western Himalayas and Assam, extending through the hill country of Burmah to Western China; Maychee, in Eastern China; Sumatra.

Clavis specierum.

- a. minor; pileo et collo postico olivascentibus *innominata*.
 b. major; pileo et collo postico rufescenti-brunneis *chinensis*.

1. VIVIA INNOMINATA.

Picumnus innominatus, Burton, P. Z. S. 1835, p. 154; Blyth, J. A. S. Beng. xii. p. 1005 (1843); Gray, Gen. B. ii. p. 433 (1845); id. Cat. Mamm. &c. Nepal coll. Hodgs. p. 114 (1846); Lafr. Rev. Zool. 1847, p. 79, note; Blyth, Cat.

B. Mus. As. Soc. p. 65 (1849); Malh. Monogr. Picidæ, ii. p. 278, pl. cxvii. figs. 5, 6 (1862); Sundev. Consp. Av. Picin. p. 105 (1866); Gray, List Pici. Brit. Mus. p. 28 (1868); id. Handl. B. ii. p. 180, no. 8531 (1870).

Vivia nipalensis, Hodgs. J. A. S. Beng. vi. p. 107 (1837); id. Icon. ined. Brit. Mus. App. pl. 35. figs. 1, 2 (No. 161 ♂, 162 ♀).

Piculus nipalensis, Blyth, J. A. S. Beng. xii. p. 1005 (1843); Hodgs. in Gray's Zool. Misc. p. 85 (1844, ♂).

Piculus rufifrons, Hodgs. in Gray's Zool. Misc. p. 85 (1844, ♀).

Vivia innominata, Jardine, Contr. Orn. i. p. 300; Bp. Consp. p. 140; Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 677 (1856); Jerd. B. Ind. i. p. 300 (1862); Gray, Cat. Mamm. &c. Nepal coll. Hodgs. 1863, p. 62; Gould, B. Asia, pt. xxii. (1870); Blyth & Wald. B. Burm. p. 78, no. 128 (1875); Brooks, Str. F. 1875, p. 232; Hume, op. cit. 1877, p. 351; id. & Davison, op. cit. 1878, p. 148; Scully, tom. cit. pp. 250, 365; Hume, op. cit. 1879, p. 88; Salvad. Ann. Mus. Civic. Genov. xiv. p. 184 (1879).

Vivia nepalensis, Reichb. Handb. spec. Orn. Pic. p. 342, Taf. dcviii. figs. 4120, 4121 (1854).

Pipiscus innominatus, Cab. & Heine, Mus. Hein. Th. iv. p. 9 (1863).

Adult male. Above, including the rump and upper tail-coverts, uniform bright yellowish olive; wing-coverts dusky brown, broadly margined with yellowish olive; primaries dusky brown, externally edged with bright yellowish olive, the basal half of the inner webs edged with whitish; secondaries dusky brown, the outer webs bright olive-yellow, with the tips greyish, the inner webs edged with greyish, whiter near the base: the innermost of the secondaries rather lighter in colour, and more washed with yellowish olive; shafts dark brown; tail black, the inner webs and part of the basal portion of the outer webs of the central pair of feathers white, the three outermost pairs having part of their outer webs and the ends white, the tips of the outer webs edged with dusky black; shafts of the central pair white, of the remainder

black, but where the webs are white the shafts are also the same ; forehead reddish orange, the tips of the feathers being of this colour, the middle portion black, and the bases grey ; near the upper mandible the feathers are edged with yellowish olive ; crown olive ; lores yellow ; a stripe over and under the eye, and extending down the sides of the face and neck, white ; the stripe which is over the eye and runs down the side of the neck extends to the hind neck, and forms a partial collar of white and black, the inner webs of the feathers being of the latter colour ; ear-coverts and the space between the white stripes blackish brown ; moustachial stripe dusky black, the feathers tipped with yellowish white ; chin and throat whitish, the feathers having blackish tips ; chest, breast, and entire under surface of the body, including flanks and thighs, pale yellow, the chest, breast, and upper part of the abdomen being spotted with intense black, the flanks and thighs barred with the same ; under tail-coverts yellowish, barred with dusky black ; under surface of the tail repeating the colours of the upper surface, but the black and white not so strongly pronounced ; shafts as upon the upper surface ; under wing-coverts of the primaries dusky, of the secondaries white, with pale yellowish and dusky bars ; edge of the bastard wing yellow ; axillaries white ; under surface of the wing dusky, the margins of the inner webs pale brown near the tip, and white at the base ; shafts of some of the outermost primaries brownish white, the remainder white, dusky towards the tip ; “ bill plumbeous ; irides brown ; legs plumbeous ” (*Jerdon*) ; “ bill plumbeous black ; irides brown ; feet darkish plumbeous ” (*J. Scully*).

Total length 3·3 inches, culmen ·48, wing 2·2, tail 1·2, tarsus ·5, toes (without claw), outer anterior ·4, outer posterior ·4, inner anterior ·27, inner posterior ·2.

Younger male. The upper parts are less rich in colour than in the adult ; the crown is more ashy brown than in the adult female, but it has a tinge of olive ; the tips of the feathers of the forehead are more orange than in the older bird ; the ear-coverts and sides of the neck, between the two white stripes, are browner ; there is more white upon the throat, and the

entire under surface of the body is whiter than in either the adult male or female.

Total length 3·2 inches, culmen ·45, wing 2·2, tail 1·2, tarsus ·47.

Adult female. Resembling the adult male, but having the upper parts less brilliant; the crown and hind neck are more ashy olive; the forehead yellowish olive; the lores are not of such a deep yellow; and this colour upon the under surface of the body is also paler. "Females in *May* and *June*: bill plumbeous, or dusky plumbeous, lighter below; irides brown; feet plumbeous; claws dusky" (*J. Scully*).

Total length 3·6 inches, culmen ·5, wing 2·27, tail 1·22, tarsus ·48.

Younger female. Less brilliant upon the upper parts than the young male; the crown is the same, but the forehead is yellowish olive; in other respects similar to the young male.

On comparing specimens from the North-western Himalayas with others from Nepal I cannot find that they are in any way separable; but one of Captain Stackhouse Pinwill's birds in the British Museum is somewhat remarkable, showing white tips to some of the outermost of the greater wing-coverts, while some of the exterior median coverts also show a white streak, interrupted near the tip. A young male from Nepal, however, also shows white tips on some of the outermost greater coverts. At present I have seen no other birds exhibiting this peculiarity, which I am not able to account for, and must leave the point open for future investigation. These white tips to the coverts are not a sign of immaturity; for the bird from the North-west Himalayas is certainly quite adult.

As above mentioned, the Indian Speckled Piculet was procured by Captain Pinwill in the North-western Himalayas; but the exact locality was not recorded on the labels of the birds; it was probably near Mussoorie, between which place and Gangaotri the species was noticed by Mr. W. E. Brooks, as well as near Dangali. According to Jerdon, it is found throughout the whole Himalayan range, extending, so far as is known, from 3000 to 6000 feet or so. Quite re-

cently a specimen was obtained by Mr. Darling in the Wynnaad (as recorded by Mr. Hume, Str. F. 1877, p. 351), "a fertile valley, elevated about 2500 feet above the sea, and lying between the Nilgheris and those portions of the Western Ghats overlooking Cannanore, Calicut, &c.," a locality quite unexpected for the species. It is also met with in the Khasia hills, whence Mr. Hume states that he has specimens; and he also mentions having received it from the hills of Tenasserim. This is apparently since he wrote his paper on the birds of the latter province (Str. F. 1878, vol. vi.), as he there stated that Mr. Davison, up to the time of publication, had not met with the bird. Capt. Wardlaw Ramsay found it in the Karen hills at an elevation of 2000 feet; and it extends into the mountains of Western China, as Père David procured it in Kokonor. Dr. Beccari obtained a female bird in Sumatra, on Mount Singalan, which Count Salvadori has identified doubtfully as the present species, having found it similar to a bird from Nepal. A comparison with Himalayan specimens will be necessary to settle this point. In the Himalayas, according to Jerdon, it is found in tangled brushwood, and among dead and fallen trees in damp spots, hunting about among the decaying bark for various insects. It is said to breed in holes of trees. Dr. Scully remarks, in his "Contribution to the Ornithology of Nepal" (Str. F. 1879, vol. viii. p. 250), "The Speckled Piculet is fairly common in the woods in the central part of the valley of Nepal, and in some part of the forests at the foot of the hills. I found it quite a tree-bird, and never noticed it in tangled brushwood &c., as mentioned by Jerdon."

I have examined the following specimens of *Vivia innominata* :—

E Mus. Brit.

a, b. ♂ ♀ ad. sk. N.W. Himalayas (Capt. Stackhouse Pinwill).

c, d, e. Ad. st. Nepal (B. H. Hodgson). Types of *Piculus nipalensis* and *P. rufifrons*.

f, g, h. Ad. sk. Nepal (*B. H. Hodgson*).

i, k. ♂ ♀ ad. sk. Nepal (*B. H. Hodgson*). India Museum.

E. Mus. E. Hargitt.

a. ♀ juv. Native Sikhim, July 1874 (*L. Mandelli*).

b, c, d. ♂ ad. *e.* ♀ ad. Darjeeling (*L. Mandelli*).

f. ♀ ad. *g.* ♂ juv. Assam. Purchased.

2. *VIVIA CHINENSIS*, sp. n. (Plate VII.)

Male. Above, including the rump and upper tail-coverts, uniform yellowish olive; wing-coverts from olive-brown in the lesser series to yellowish olive in the greater; quills dusky brown, edged externally with yellowish olive, the inner webs margined with greyish white; the apical half of the outer webs of a few of the outermost primaries greyish brown; edge of the wing and the basal three fourths of the outer web of the bastard primary white; shafts of the quills black; tail black, the inner webs of the central pair of feathers white, the dwarf feather having a large portion of the outer web white; the two penultimate have the apical portion of the outer webs, and the extreme tip of the inner webs white, the outer margined with blackish at the tip; the fourth outer feather has the margin of the outer web whitish at the tip; the one next to the central pair is entirely black; shafts of the central pair white, of the remainder black; but where the webs are white, so is that part of the shaft; the crown light brownish rufous; the feathers of the forehead are crossed with a dark, blackish bar and tipped with orange; but the latter is not very distinct; lores, a stripe over and under the eye and down the neck, white; ear-coverts and sides of the neck, between the white stripes, chestnut, darker than the crown; moustachial stripe black, with a mixture of brown and white upon the upper webs and tips of the feathers; chin and throat white with a yellow tinge; breast and entire under surface of the body white with a tinge of yellow; the breast and abdomen covered with large spots of black, the flanks barred with the same; under tail-coverts yellowish white, the feathers having at their tips a spot of black upon each web, but they appear



J G Keulemans lith.

Hanhart imp

VIVIA CHINENSIS.

as if barred ; under surface of the tail repeating the upper ; under wing-coverts sooty black ; edge of the wing, to the carpal joint, yellowish white ; axillaries a mixture of dusky and white ; under surface of the wing dusky, the margin of the basal half of the inner webs whitish ; shafts white at the base, light dusky brown towards the tip ; some of the shafts of the outermost primaries are white at the extreme base, the remaining part being light yellowish grey or brown. " Eyes brown-black ; bill plumbeous ; feet plumbeous " (MS. label).

Total length 4·5 inches, culmen ·5, wing 2·3, tail 1·35, tarsus ·5 ; toes (without claws)—outer anterior ·4, outer posterior ·4, inner anterior ·27, inner posterior ·17.

The unique specimen of this bird was presented by Mr. Bowdler Sharpe to the British Museum, and is marked as being from May-chée. He procured it out of a number of Chinese birds offered for sale in London some years ago, and apparently duplicates from the Shanghai Museum. The label states that the sex could not be ascertained, as the parts were damaged by shot ; but I have no doubt, in my own mind, that it is a male. The species appears to be a very distinct one, differing from *V. innominata* in its larger size, and in the colour of the crown, which is rufescent brown, instead of olive-brown.

2. VERREAUXIA.

Sasia, pt., Verr. Rev. et Mag. de Zool. p. 217 (1855).

Verreauxia, Hartl. Orn. W.Afr. p. 176 (1857). Type *V. africana*.

Picumnus, pt., Malh. Monogr. Picid. ii. p. 284 (1862).

Nannopipo, Cab. & Heine, Mus. Hein. Th. iv. p. 9 (1863). Type *V. africana*.

Range. Confined to the forests of the Gaboon.

1. VERREAUXIA AFRICANA.

Sasia africana, Verr. Rev. et Mag. de Zool. 1855, p. 218 ; Gray, List Pic. Brit. Mus. 1868, p. 29 ; id. Hand-l. B. ii. p. 180. no. 8535 (1870).

Verreauxia africana, Hartl. Orn. W.Afr. 1857, p. 176. no. 523; id. J. f. O. 1861, p. 263.

Picumnus verreauxii, Malh. Monogr. Pic. ii. p. 284, pl. 118. fig. 1.

Nannopipo africana, Cab. & Heine, Mus. Hein. Th. iv. p. 9 (1863).

Picumnus africanus, Sundev. Consp. Av. Picin. p. 106 (1866).

General colour above, including the rump and upper tail-coverts, uniform olive, slightly tinged with golden olive; the head a little darker, the bases of the feathers leaden grey; wing-coverts similar to the back; quills blackish, the outer webs of the primaries edged narrowly, and those of the secondaries more broadly, with bright olive; the margins of the inner webs light grey, white near the base; shafts black; tail blackish, edged with olive, shafts black; forehead orange-chestnut, ochreous yellow near the bill; a narrow superciliary stripe of white; cheeks and sides of the face and neck a mixture of bluish grey and light chestnut; chin, throat, and entire under surface of the body, including flanks and thighs, a mixture of bluish grey (tinged with olive) and light chestnut, the tips of the feathers being of the latter colour; the bases are leaden grey; under tail-coverts bluish grey, tipped with light chestnut; under surface of the tail dusky; under wing-coverts white; axillaries white; under surface of the wing dusky, the margins of the inner webs greyish white; shafts white near the base, dusky towards the tip.

Total length 2·6 inches, culmen ·4, wing 1·9, tail ·55, tarsus ·42; toes (without claws)—outer anterior ·3, outer posterior ·3, inner anterior ·22, inner posterior 1·17.

The only specimen of this bird which I have seen, as yet, is in the British Museum, and appears to me to be not quite adult. It is not, however, very dissimilar to the bird figured by Malherbe; and Dr. Hartlaub gives full descriptions of both sexes from examples in the Bremen Museum, though these again would seem to be scarcely mature. Should they prove to be so, the resemblance of adult *Verreauxia* to the immature plumage of the Eastern *Sasia* is remarkable. According

to Hartlaub the female differs from the male in having the head and the entire belly greyish olive.

3. SASIA.

Picumnus, pt., Is. Geoffr. St. Hilaire, Nouv. Arch. du Mus. 1832, p. 397.

Sasia, Hodgs. J. A. S. Beng. v. p. 778 (1836). Type *S. ochracea*.

Microcolaptes, Gray, List Gen. B. p. 54 (1840). Type *S. abnormis*.

Comeris, Hodgs. J. A. S. Beng. x. p. 27 (1841). Type *S. ochracea*.

Dryaltes, Gloger (teste G. R. Gray). Type *S. ochracea*.

Picumnoides, Malh. Mon. Piced. ii. p. 286 (1862). Type *S. abnormis*.

Range. Eastern Himalayas, from Nepal and Sikhim to Assam, Arakan, Burmese hills, and Tenasserim, through the Malayan peninsula to Java, Sumatra, and Borneo.

Clavis specierum.

a. fronte aureâ (mares).

a'. fasciâ supraparoticâ fulvescenti-albâ ; collo postico rufescenti lavato *ochracea*.

b. fasciâ supraparoticâ rufâ, regioni paroticæ concolori ; collo postico dorso concolori, nec rufescente *abnormis*.

b. fronte rufâ (feminæ).

c'. fasciâ supraparoticâ fulvescenti-albâ *ochracea*.

d'. fasciâ supraparoticâ rufâ *abnormis*.

1. SASIA OCHRACEA.

Sasia ochracea, Hodgs. J. A. S. Beng. v. p. 778 (1836) ; id. icon. ined. Brit. Mus. App. pl. 35. fig. 3 (659) ; Blyth, J. A. S. Beng. xii. p. 1005 (1843) ; Gray, Gen. B. ii. p. 433 (1845) ; Gray, Cat. Mamm. &c. Nepal pres. Hodgs. p. 115 (1846) ; Blyth, Cat. B. Mus. As. Soc. p. 65 (1849) ; Bp. Consp. Av. Gen. i. p. 140 (1850) ; Reichb. Handb. Spec. Orn. Picin. p. 342 (1854) ; Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 678 (1856) ; Jerd. B. Ind. i. p. 301 (1862) ; Gray, Cat. Mamm. &c. Nepal pres. Hodgs. p. 62 (1863) ; Gray, List Piced. Brit. Mus. p. 29 (1868) ; id. Handl. B. ii. p. 180,

no. 8532 (1870) ; Jerd. in Ibis, 1872, p. 10 ; Blyth & Wald. B. Burma. p. 78 (1875) ; Hume & Oates, Str. F. iii. p. 75 (1875) ; id. & Davison, op. cit. vi. p. 148 (1878) ; Hume, op. cit. viii. p. 88 (1879).

Comeris ochracea, Blyth, J. A. S. Beng. xii. p. 1005 (1843).

Microcolaptes ochraceus, Blyth, J. A. S. Beng. xiv. p. 191 (1845) ; Cab. & Heine, Mus. Hein. iv. p. 8 (1863).

Picumnoides ochraceus, Malh. Monogr. Pucid. ii. p. 287 (1862).

Comeris (Sasia) ochracea, Hodgs. in Gray's Zool. Misc. 1844, p. 85.

Sasia lacrymosa, Lafr. Rev. et Mag. Zool. p. 208 (1854).

Picumnoides lacrymosa, Malh. Monogr. Pucid. ii. p. 287 (1862).

Picumnus ochraceus, Sundev. Consp. Av. Picin. p. 106. no. 27 (1866).

Sasia abnormis, Hume & Davison (nec Temm.), Stray F. ii. p. 472 (1874) ; Blyth & Wald. B. Burma, p. 78 (1875).

Adult male. Above, general colour yellowish olive, tinged with orange-rufous ; lesser, median, and greater wing-coverts uniform olive ; primary-coverts dusky black ; bastard wing dusky black, edged with buff ; quills dusky black, edged externally with olive ; the outer web of the bastard primary edged with white ; two or three of the innermost of the secondaries pale brown tinged with rufous and edged with golden olive ; the basal half of the inner webs of the primaries edged with greyish white ; the secondaries have a white patch covering the base of the inner webs, shafts black ; rump orange tinged with rufous ; upper tail-coverts and tail deep velvety black, shafts black ; forehead golden yellow near the upper mandible, shading into rufous ; crown olive ; a trace of a rufous collar on the hind neck ; a white stripe from behind the eye ; cheeks, sides of the face, and neck rufous ; the chin, throat, and entire under surface of the body orange-rufous, brighter and more deep golden on the breast and abdomen : under tail-coverts rufous ; under surface of the tail and shafts black ; under wing-coverts nearly white ; under surface of wing dusky ; the margin of the basal half of the inner webs of the

primaries, and nearly the entire margin of the inner webs of the secondaries whitish, the base of the inner webs of the latter white; shafts of the primaries ashy brown, those of the secondaries being white. "*Male*—bill dark brown on the upper mandible, plumbeous on the lower, inside of the mouth dusky; eyelids naked and very conspicuous dusky red; iris crimson; legs yellowish red; claws yellowish" (*Oates*). "Legs and feet dull orange; claws very pale brown; upper mandible and tip of lower mandible dark horny brown, rest of the lower mandible pale bluish; irides from pale red to dark crimson; orbital skin dull crimson" (*W. Davison*). "Bill plumbeous; orbital skin pink; irides pale brown; legs pale red" (*Jerdon*).

Total length 3·1 inches; culmen ·53, wing 2·12, tail ·9, tarsus ·5; toes (without claws)—outer anterior ·47, inner anterior ·3, posterior ·45.

Adult female. Closely resembling the adult male, but having the forehead rufous chestnut, and the rufous tint on the under surface of the body rather deeper in colour than in the male.

Total length 3 inches, culmen ·55, wing 2·12, tail ·9, tarsus ·55.

Younger male. The upper parts are less rich in colour than in the fully adult male; the yellow upon the forehead is not so brilliant; the crown, wing-coverts, and outer webs of the quills are not of so bright a yellowish olive; those parts which are orange-rufous in the fully adult, are of a very pale ochreous, except the ear-coverts, which are of a deeper rufous; the chest is tinged with golden; in other respects like the fully adult, but more dingy in colour.

Another bird, not fully adult, evidently a female, has the upper parts not so rich in colour as the younger male described; the crown is more dusky; the forehead is also more dusky, but mixed with dingy rufous; the wing-coverts of the same colour as the crown; under the eye there is a dusky patch; the parts which are orange-rufous in the fully adult, are of a dingy rufous.

The Indian Rufous Piculet was first described by Mr.

Hodgson, who found it in the forests of the lower regions of Nepal, and bestowed on it the generic name of *Sasia*, from its native title among the Nepalese. Later on he wished to change this name to the more classical one of *Comeris*; but, if any change at all be necessary, it appears from the synonymy given above that *Microcolaptes* of Gray would have priority. *Sasia*, however, has been so universally adopted and is in such general use that any change in nomenclature seems to me unnecessary. Dr. Jerdon states that this little bird is found in Nepal and the Eastern Himalayas, as also in Assam, Sylhet, and Arracan. It is not rare at Darjeeling, from about 3000 to 6000 feet or so. Like *Vivia innominata*, it hunts chiefly among the brushwood, and more especially among fallen and decayed trees, near the banks of streams. It lives entirely on insects. He never saw it climb on large trees. It is said to breed in holes of trees. Lieut. Wardlaw-Ramsay met with the species on the Tonghoo hills, and Mr. Oates procured a single specimen on the Pegu hills, where he considers it must be rare, though, from its small size, it may escape notice. He observes, "I shot one while pecking very hard at a bamboo about twenty feet from the ground. It was making a very loud noise, tapping incessantly for some minutes. To judge from appearances presented on dissection, they must breed towards the end of April." In Tenasscrim, according to Mr. Hume, it is found throughout the province, but not ascending the higher hills. Mr. Davison gives similar notes on the habits to those recorded above. There appears to have been considerable confusion regarding the colouring of the sexes in this species. Malherbe states that they are alike, but does not appear to have examined specimens himself. Mr. Hodgson also says that the sexes are alike. The late Dr. Jerdon mentions that the forehead is ochreous in females, from which I suspect he had a young male before him, as, in my experience both of this species and *S. abnormis*, the females differ from the males in having the forehead entirely rufous.

I have examined the following specimens :—

E Mus. Brit.

- a, b* [♀ ad.]; *c*, imm. Sk. Nepal (*B. H. Hodgson*).
d, e, f [♂ ad.]. Sk. Nepal (*B. H. Hodgson*). India Museum.
g [♂ ad.], *h, i* [♂ ♀ imm.]. Sk. Nepal (*B. H. Hodgson*).
k [♂ ad.]. Sk. Nepal. Purchased.
l. St. Nepal (*B. H. Hodgson*). Type of the species *.

E Mus. E. Hargitt.

- a*. ♂ imm. Nepal. Purchased.
b, c, d. ♂; *e*. ♀ ad. Darjeeling (*L. Mandelli*).
f. ♂ ad. Native Sikhim, January 1874 (*L. Mandelli*).

2. *SASIA ABNORMIS*.

Picumnus abnormis, Temm. Pl. Col. vol. iv. pl. 371. fig. 3 (1825); Less. Man. d'Orn. ii. p. 115 (1828); Wagl. Isis, 1829, p. 647; Less. Traité, p. 231; Swains. Classif. B. ii. p. 311 (1837); Jerd. B. Ind. i. p. 302; Sundev. Consp. Av. Picin. p. 106 (1866).

Microcolaptes abnormis, Gray, List Gen. B. 1840, p. 54; id. List, 1841, p. 70; Blyth, J. A. S. B. xiv. p. 191 (1845); Cab. & Heine, Mus. Hein. Th. iv. p. 8 (1863).

Sasia abnormis, Gray, Gen. B. ii. p. 433 (1845); Blyth, Cat. B. Mus. As. Soc. p. 65 (1849); Bp. Consp. i. p. 140 (1850); Reichb. Handb. Spec. Orn. Pic. p. 342, pl. dcviii. fig. 4119 (1854); Wallace, Ann. & Mag. Nat. Hist. [2] xv. p. 96 (1855); Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 678; Selater, P.Z.S. 1863, p. 211; Pelz. Reis. Novara, Vog. pp. 101, 162 (1865); Gray, List Piciæ Brit. Mus. p. 29

* Mr. Moore, in the Catalogue of the East-India Company's Museum, states that the three specimens presented to that institution by Mr. Hodgson were the types of the species. These specimens are now in the British Museum, and are enumerated above as *d, e, f*. Mr. Hodgson's figure in his unpublished drawings appears to represent a male, but is not so well drawn as is usually the case. It appears to me, however, to have been taken from specimen *l*, which was presented about the same time as the drawings to the British Museum, some years before any were given to the India Museum. It is, in all probability, the actual type of the species, though this question is now of less moment, since the addition of the India-Museum collection to the British Museum, in which institution the typical specimen now exists without doubt.

(1868); Gould, B. Asia, part xxii. (1870); Gray, Hand-l. B. ii. p. 180. no. 8533; Salvad. Ucc. Born. p. 60 (1874); Sharpe, P. Z. S. 1875, p. 103; Tweedd. Ibis, 1877, p. 292; Sharpe, P. Z. S. 1879, p. 327; id. Ibis, 1879, p. 243; Hume, Str. F. 1879, pp. 53, 88.

Picumoides abnormis, Malh. Monogr. Picid. ii. p. 287, pl. cxv. fig. 1 (1862).

Adult male. Above uniform yellowish olive, brighter on the rump, the tips of the feathers of the latter orange-rufous; primary-coverts blackish, edged with olive; the other series of wing-coverts uniform yellowish olive; edge of the wing rufous; quills dusky black, the outer webs yellowish olive, the inner edged upon their basal half with greyish white; a few of the innermost of the secondaries are paler and washed with olive; shafts black; upper tail-coverts deep black; tail uniform black, likewise the shafts; forehead golden orange; crown and hind neck uniform yellowish olive; lores and sides of the face and neck orange-rufous; the ear-coverts more chestnut; chin, throat, and entire under surface of the body orange-rufous, a few silken feathers of a bright golden yellow on the breast; upon the sides of the upper breast a patch of olive; under tail-coverts rufous orange, tipped with yellowish white; under surface of the tail uniform black, as are likewise the shafts; under wing-coverts buffy white; under surface of the wing dusky, the margins of the inner webs buff near the base; shafts pale greyish brown, white at the base. "Iris crimson; orbital patch dull crimson; legs chrome; bill black, the mandible greenish yellow" (*Everett*).

Total length 3·3 inches, culmen ·55, wing 2·07, tail ·95, tarsus ·5; toes (without claws)—outer anterior ·37, inner anterior ·27, posterior ·37.

Adult female. Resembling the adult male, but less bright in colour on the upper parts, wing-coverts, and outer webs of the quills; the rump more rufous; the forehead rufous, the crown scarcely so bright a yellowish olive; in other respects similar to the adult male. "Iris crimson; orbital patch dull crimson; legs chrome; bill black, the mandible greenish yellow" (*Everett*).

Total length 3·2 inches, culmen ·53, wing 2·1, tail ·85, tarsus ·55.

Young. Above uniform yellowish olive; wing-coverts similar to the back; quills dusky black, edged externally with olive; the margin of the basal two thirds of the inner webs whitish, at the extreme base white; shafts black; rump olive, the feathers tipped with dingy rufous; upper tail-coverts black; tail and shafts black; forehead and crown uniform dusky olive; sides of the face dingy rufous; sides of the neck olive; chin and throat a mixture of olive dusky and dingy rufous; under surface of the body olive dusky, tinged with dingy rufous on the flanks and thighs; under tail-coverts dingy rufous; under surface of the tail and shafts black; under wing-coverts white, with a very faint buffy tinge; the carpal joint and edge of the wing dusky; under surface of the wing dusky, the basal two thirds of the margin of the inner webs whitish, with a tinge of buff; shafts light grey, white at the base.

Total length 3·1 inches, culmen ·48, wing 2·1, tail ·9, tarsus ·55.

Another young bird, closely resembling the above, has the feathers over the nostrils rufous, likewise the ear-coverts and the fore part of the cheeks and chin.

Total length 2·9 inches, culmen ·45, wing 2·0, tail ·85, tarsus ·55 (*Mus. Brit.*).

This little species represents the Himalayan *Sasia ochracea* in the Indo-Malayan subregion, where it seems to be well distributed. It is frequent in Malaccan collections, and was at first supposed to range, like many Malayan species, into Southern Tenasserim, Mr. Davison having procured a specimen near Ye, which Mr. Hume referred originally to *Sasia abnormis* (cf. Str. F. 1874, p. 472); more recently, however, he has come to the conclusion that it was only *S. ochracea* (cf. Str. F. 1878, p. 148).

As far as we know at present, it does not range very high in the Malayan peninsula, as Dr. Stoliczka did not meet with it in Province Wellesley. In Sumatra it was procured by Mr. E. C. Buxton, and also by Mr. Wallace; but Dr. Beccari

did not come across it, nor did Mr. C. Bock meet with it in the same district. Lord Tweeddale has already remarked on the identity of specimens from Malacca, Borneo, and Sumatra; and this I find to be the case in the birds I have examined from these localities. I have not been able, personally, to compare Javan specimens; but Mr. Sharpe, at my request, has been kind enough to examine the types from Java in the Leiden Museum, and he fails to discover any difference between these and Bornean specimens with which I had supplied him.

I had been led to suspect that Javan birds might prove distinct—recollecting Malherbe's extraordinary figure, in which this *Sasia* is represented *with four toes* and with the outside tail-feathers *white*. What has become of the bird from which the figure was taken I am not able to say; but if it is in Count Turati's collection with the rest of Malherbe's Woodpeckers, it is desirable that it should be reexamined.

In collections from North-western Borneo the present species is generally to be found, being numerous in those of Mr. Hugh Low; and it was also sent from Lumbidan by the late Governor Ussher and Mr. Treacher; and in the Sarawak district it also occurs, as we know from the researches of the Marquis Doria and Dr. Beccari. By some oversight, however, Mr. Sharpe has omitted to record, in his papers on Mr. Alfred Everett's collections, the finding of this bird near Sibu and Simunjon; but in Mr. Sharpe's copy of Salvadori's '*Uccelli di Borneo*' the fact is not only duly entered, but the colours of the soft parts are copied from one of Mr. Everett's labels. These I have embodied in my description. As yet, Mr. W. B. Pryer has not met with the species in Sandakan; but the late Mr. Motley procured it near Banjermassing, whence also specimens collected by Schierbrand are in the Leiden Museum. In Count Salvadori's work on the birds of Borneo, he records a pair of birds from Sarawak, and very properly points out the silky golden appearance on the breast in both sexes, though less distinct in the female. This character is not shown in Temminck's figures, nor in Malherbe's, the latter author figuring the base of the outer

tail-feathers as whitish, an appearance not shown in any of the specimens examined by me, which have been as follows :—

E Mus. Brit.

- a.* [♀] ad. sk. Malacca. India Museum. [Horsf. & Moore, Cat. p. 678.]
- b, c.* [♂ ad.] sk. Malacca (*W. Harvey*).
- d.* [♂ ad.] sk. Malacca (*Hugh Cuming*).
- e.* ♀ ad. sk. Mount Ophir, Malacca (*A. R. Wallace*).
- f.* ♂ ad. sk. Sumatra (*A. R. Wallace*).
- g, h.* [♂ ♀ ad.] sk. N.W. Borneo (*H. Low*).
- i.* Juv. sk. N.W. Borneo (*H. Low*).

E. Mus. E. Hargitt.

- a* [♂], *b, c* [♀]. Sk. Borneo.
- d.* Juv. sk. N.W. Borneo (*Hugh Low*).
- e, ♂ ; f, g, ♀ .* Sk. N.W. Borneo (*Hugh Low*).

XVII.—*On some necessary Changes in the Nomenclature of South-American Birds.*—By HANS, Graf von BERLEPSCH.

ORNITHOLOGISTS will generally find me unwilling to change long-established nomenclature, especially when there is no other reason for doing so than to call into usage obscure old names which may have a slight advantage of priority, but in other respects had better be ignored. I mean such names as those of Müller, Boddaert, and others, which have only during the last few years come into usage, and have been called forth to supersede denominations which had become quite familiar to us, being founded on descriptions unmis- takably intended for the species bearing them. Nevertheless I am of opinion that we ought to change (or erase from our list) even the most familiar denomination if it can be proved that it was originally intended for another species, or if the description is so vague that it is quite impossible to say what bird the author of the name really meant by it.

In the following pages I propose to refer to some such, or similar, cases in which I believe it is necessary to change the names usually applied to certain species :—